Class Diagram Table

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Class	Method	Description
System		
	+ initialLogin(systemCmd: char): char	Takes user's command as in input, verifies that the command logins after a login, also that subsequent logins can not occur, and that a transaction command cannot occur before a login. Returns a message suggesting whether login was successful or invalid
	+ verifyUsername(username: char): boolean	Takes a username as input. Checks that the username is existing user from the user accounts file. Also checks for invalid input as username e.g. username exceeds 15 characters, new user, etc. Returns true or false for system accepting username.
	+ initiateTransaction(user_type: char, transactionName: char): boolean	Takes user's account type, and the transaction they want to issue. Checks that transaction is valid. It returns whether the transaction can proceed.
	+ logout():char	Returns message for logging out. It checks whether user can logout in current system status.
Transaction		
	+ create(username: char, user_type: char): char	Takes in username, and user type then makes a new user assigning it the name and the type for user, based on meeting constraints. It returns a message for completing create transaction.
	+ isAdmin(user_type: char): boolean	Takes in the user type and determines whether the user is an admin or not an admin. It true for admin and false if the user type is not an admin.

	+ addcredit(username: char, credit_amout: float)	Takes in username and the amount to credit. If user account is an admin then it adds to the user account with the username the credit amount. If the user is not an admin then only the username is used.
	+ refund(buyer_username: char, seller_username, credit_transfer: float)	Takes in buyer's name, the seller's name and the amount of credit to transfer. Transfers the credit from the seller's account to the buyer's account.
	+ buy(eventTItle: char, quantity: integer, seller_username: char)	Takes in the event title, the number of tickets to be bought, and the seller's username to process the transaction. The buy will calculate the total amount the tickets costs to buy, and prompt user whether they want to proceed with the purchase of the tickets.
	+ sell(eventTItle: char, sale_price: float, quantity: integer)	Takes in the event title, the price of the tickets, and the number of tickets being sold.
	+ deleteUser(username: char): char	Takes in username and deletes the user associated with the username from the user accounts file. Also sets the member variable user_deleted to be true. Returns a message to inform user delete transaction was successful
	+ isUserDeleted(): boolean	Retrieves the value of member variable user_deleted. Returns the true false value of the user_deleted variable.
Ticket Inventory		
	+ totalPrice(quantity: int, ticket_price:float): float	Takes in number of tickets, and the price for a single ticket. The method calculates the total price for the tickets and returns this total.
	+ findSeller(ticket_file: char): char	Takes as input the ticket file to read the file. It returns the seller's name.
	+ findEvent(ticket_file: char): char	Takes as input the ticket file to read the file. It returns the event title.

	+ numberTickets(ticket_file: char): integer	Takes as input the ticket file to read the file. It returns the number of tickets to sell.
User Account		
	+ findUsername(file_name: char): char	Takes as input the user accounts file to read the file. It returns the username.
	+ findAccType(file_name: char): char	Takes as input the user accounts file to read the file. It returns the account type of the user.
	+ findAvaliableCredit(file_name: char): float	Takes as input the user accounts file to read the file. It returns the amount of credit the user has in account.
	+ debitAccount(value: float)	Takes as input the amount to debit into user account. Adds the value to the user's available credit.
	+ creditAccount(value: float)	Takes as input the amount to credit into user account. Decreases the value from the user's available credit.